HYPHALUS WISEI SP.N., A NEW INTERTIDAL BEETLE FROM NEW ZEALAND (COLEOPTERA: LIMNICHIDAE)

E. B. BRITTON DIVISION OF ENTOMOLOGY, CSIRO CANBERRA, AUSTRALIA

Abstract. A second species of the genus Hyphalus (Coleoptera: Limnichidae), H. wisei sp.n., is described on material taken in the intertidal zone on the North Island of New Zealand. Additional localities for Hyphalus insularis Britton, on the east coast of Australia, are recorded.

Following publication of the description of the intertidal limnichid species *Hyphalus insularis* (Britton 1971, J. Ent. (B) 40 (2): 83-91), Mr K. A. J. Wise of the Auckland Museum kindly sent me some small beetles which he had taken between tide marks on the coast of New Zealand. These proved to represent a second species of *Hyphalus* which is described below.

I have also received, by courtesy of Mr Louis Koch of the Western Australian Museum, specimens of *H. insularis* collected on the Queensland coast by Mr Derham Giuliani of Big Pine, California. Mr Giuliani made collections of insects at many points on the Australian coast over a period of two years and has presented his material to the Western Australian Museum.

The new localities for Hyphalus insularis are as follows.

Alligator Bay, c. 160km N of Rockhampton, Q.

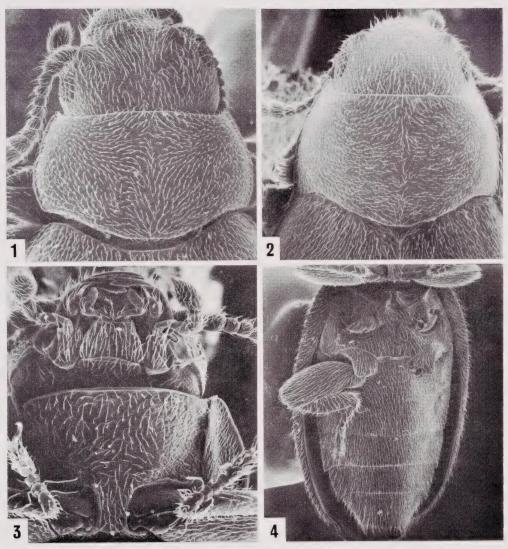
Dingo Beach (22° 08′ S, 149° 33′ E), Q.

Sand Bay, near Cape Hillsborough (20° 56' S, 149° 02' E), Q.

Yorkey's Knob, Cairns (16° 48' S, 145° 44' E), Q.

Green Island (16° 46' S, 145° 48' E), Q.

Mr Giuliani notes that he did not find this species in the intertidal zone to the north and south of these localities. Localities examined to the south were Round Hill Head, Q. (24° 10′ S, 151° 53′ E), Double Island Point, N.E. of Gympie, Q. (25° 56′ S, 153° 11′ E), and North Head, E. of Nambour, Q. (24° 45′ S, 152° 24′ E). Localities to the north, at which the species was not found, were Port Douglas (16° 29′ S, 145° 28′ E), Q, and Finch Bay, Cooktown (15° 28′ S, 145° 16′ E), Q. Present indications are, therefore, that the species does not occur south of the Tropic of Capricorn and that it may be absent from the far north coasts. At Sand Bay the beetles were found on rocks half a mile out from high tide mark, whereas on Green Island they were on "beach rock" as on Heron Island.



Figs. 1-4. 1, 3, 4. *Hyphalus wisei* sp. n. 1. Head and pronotum, dorsal. 3. Head and prothorax, ventral. 4. Metasternum and abdomen, ventral. 2. *Hyphalus insularis* Britton. Head and pronotum, dorsal.

Family LIMNICHIDAE Subfamily HYPHALINAE

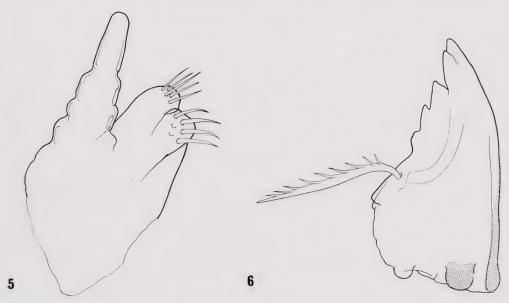
Hyphalus wisei sp.n.

(Figs. 1-6)

ADULT Length 1.1 - 1.2mm. Colour of body surface uniform black. Body with a uniform dense clothing of short pale setae giving it an overall greyish appearance. Legs black, except tarsi brown. Antennae and maxillary palps brown.

The species is very closely related to Hyphalus insularis but distinguished as follows.

| | wisei | insularis |
|--|---|--|
| Prosternal intercoxal process | narrow (Fig. 3) | wider |
| Proportions of elytra and abdomen | more elongate (ratio of length/max. wdth c. 1.55/1) | less elongate (ratio of length/max. width c. 1.30/1) |
| Separation of hind coxae | less (ratio of distance between coxae/width of one coxa c. 1/1) | greater (ratio of distance between coxae/width of one coxa c . 1.6/1). |
| Posterior angles of pronotum | more obtuse (Fig. 1) | less obtuse (Fig. 2) |
| Ratio of max. width/mid length of pronotum | c. 1.5/1 (Fig. 1) | c. 1.6/1 Fig. 2) |
| Aedeagus | median lobe shorter than parameres | median lobe as long as parameres |



Figs. 5, 6. Hyphalus wisei sp. n., larva. 5. Left maxilla. 6. Right mandible.

LARVA Length 2mm. Colour pale to dark brown; very similar in form to larva of *H.insularis*. Maxilla as Fig. 5; mandible as Fig. 6, with a long penicillus on middle of inner face.

A similar but shorter penicillus is present on the mandible of the larva of *H.insularis*. A penicillus is present on the larval mandibles in the families Ptilodactylidae, Psephenidae, Helminthidae and Dryopidae but not in the Limnichidae: Limnichinae.

Types. NEW ZEALAND: North Island, Rodney County, on a rock platform, exposed at low tide, on the mainland opposite Goat I, near Cape Rodney, N. of Leigh (36° 16′ S, 174° 48′ E), 5. xii. 1968, K. A. J. Wise. Holotype and 2 paratypes lodged in collection of Auckland Institute and Museum, 1 paratype in collection of the Entomology Division, D.S.I.R., New Zealand, 2 paratypes in Australian National Insect Collection, Canberra, A.C.T.